## Case 2911

# Spherillo Dana, 1852 (Crustacea, Isopoda): proposed designation of S. vitiensis Dana, 1853 as the type species, with designation of a neotype

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Abstract. The purpose of this application is to stabilise the nomenclature of the nominal genus *Spherillo* Dana, 1852 for a widespread genus of woodlice. Confusion arises from the absence of a type species designation and a tradition of neglect of the rules of nomenclature by isopod taxonomists. A neotype is designated for *Spherillo vitiensis* Dana, 1853, which is proposed as the type species of *Spherillo*.

**Keywords.** Nomenclature: taxonomy; Crustacea; Isopoda; ONISCIDEA; *Spherillo*; *Spherillo* vitiensis; woodlice.

1. Dana (1852, p. 301) described a genus of woodlice from some of the Pacific islands; he named the genus *Spherillo* but did not name any species. The nominal genus is available from 1852, although some authors attribute it to 1853 when Dana described four species in *Spherillo*: *S. monolinus* (p. 719) from New Zealand; *S. vitiensis* (p. 721) from Fiji; *S. hawaiensis* (p. 722) from Hawaii; and *S. spinosus* (p. 723) from New Zealand. He did not designate any of these species as the type. No later author has referred to Dana's material, which was believed lost when the ship *Peacock*, carrying most of the Dana types, sank off the mouth of the Columbia River, Oregon, in the last century (in litt., Dr Brian Kensley, Smithsonian Institution, Washington).

2. Budde-Lund (1904) widened the concept of *Spherillo* to include 65 species including Dana's four original species: he grouped these 65 species into 13 un-named sections, nominating a type for each section. *Spherillo monolinus* and *S. vitiensis* were placed in Section VIII, with *S. bifrons* Budde-Lund, 1885 as the type of that section. Such designations have no validity under the Code, and do not constitute a type species designation for *Spherillo*.

3. Verhoeff (1926, p. 250) split Dana's genus *Spherillo* into several genera, but did not designate a type species for any of them. He renamed the genus *Sphaerillo* on the grounds that the name was derived from the Greek *Sphaira* (a ball), referring to its shape and ability to roll up. Under Article 33b(iii) of the Code *Sphaerillo* is an unjustified emendation (replacement name) and a junior objective synonym of *Spherillo*. He did not designate type species for *Spherillo* or *Sphaerillo*. Considerable

confusion has resulted from widespread disagreement on the validity of Verhoeff's renaming of the genus, and the two spellings Spherillo and Sphaerillo have been extensively used, sometimes as synonyms and sometimes, contrary to the Code, for different taxa. Jackson (1941, p. 3) wrote: 'Past and present workers on the assemblage of terrestrial isopods under consideration have so consistently neglected to apply the International Rules of Nomenclature that it is too late to do more than protest formally and, in the interest of clarity, accept the status quo. On these grounds it is suggested that Sphaerillo Verhoeff be retained as the generic name of the forms included under Budde-Lund's section XIII and that Spherillo should be allowed to die out, as its species are absorbed into new or already existing genera'. However, Jackson used Spherillo for 21 species and Sphaerillo for 13, with the former name as the overall heading. Vandel (1973, p. 131) proposed to resolve the problem by interpreting Spherillo Dana as a nomen nudum - an action at variance with Dana's quite detailed description of the genus (1852) and his inclusion (1853) of well characterized species. Both spellings have been used by recent authors; Spherillo has been used by Green, Ferrara & Taiti (1990) and by Kwon & Taiti (1993) and Sphaerillo has been used by Nunomura (1991) and by Yamamoto, Nakane & Takahashi (1992). To resolve this confusion we propose that the name Sphaerillo Verhoeff, 1926 be placed on the Official Index as an unjustified emendation of Spherillo Dana, 1852.

4. The first indication of type species for named genera, rather than Budde-Lund's 'sections', was by Jackson (1941, p. 19). He listed 'Type, ? *Spherillo vitiensis* Dana' for the genus *Spherillo* Dana, and 'Type, *Spherillo danae* Heller' for *Sphaerillo* Verhoeff; the designation of *S. danae* is not valid under Article 67h because it was not one of the four species first included in *Spherillo*. Jackson's listing of *Spherillo vitiensis* with a question mark is not a valid type species designation under Article 67c(3). Green (1961, p. 352) designated *Sphaerillo pygmaeus* Verhoeff, 1926 (p. 296) as the type species of *Sphaerillo* Verhoeff, but specifically excluded *Spherillo* Dana from the synonymy.

5. To achieve stability in the nomenclature of this group we propose that the Commission should designate *Spherillo vitiensis* Dana, 1853 as type species of *Spherillo* Dana, 1852; it was one of the nominal species first included in the genus (para. 1 above), and was tentatively given as the type by Jackson (1941; see para. 4 above). We also herewith designate as neotype for *S. vitiensis* the female holotype of *Melanesillo scammorum* Verhoeff, 1938 (p. 2) from Fiji Island, Viti Levu, Kaba, barrier reef, 10.V111.1917, leg. S. Bock, coll. no. 7635. Naturhistoriska Riksmuseet, Stockholm. This action serves to make *Melanesillo scammorum* a junior objective synonym of *Spherillo vitiensis*. The specific name *scannorum* has not been used since its establishment except for its mention in a check-list (Jackson, 1941, p. 18).

6. The International Commission on Zoological Nomenclature is accordingly asked:

- to use its plenary powers to set aside all previous fixations of type species for the nominal genus *Spherillo* Dana, 1852 and to designate *Spherillo vitiensis* Dana, 1853 as the type species;
- (2) to place on the Official List of Generic Names in Zoology the name Spherillo Dana, 1852 (gender: masculine), type species by designation in (1) above Spherillo vitiensis Dana, 1853;

- (3) to place on the Official List of Specific Names in Zoology the name *vitiensis* Dana, 1853, as published in the binomen *Spherillo vitiensis* and as defined by the neotype designated by Lehtinen, Taiti and Ferrara in para. 5 above (specific name of the type species of *Spherillo* Dana, 1852);
- (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Sphaerillo* Verhoeff, 1926 (an unjustified emendation of *Spherillo* Dana, 1852);
- (5) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name scanmorum Verhoeff, 1938, as published in the binomen Melanesillo scanmorum (a junior objective synonym of Spherillo vitiensis Dana, 1853).

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*: they should be sent to the Executive Secretary, 1.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).